

REMARKS

The requirement for restriction has been made final. The drawings are objected to. Claims 1 and 3 are rejected as indefinite. Claims 1-3 are rejected as obvious. Claims 4-10 are withdrawn as non-elected.

Claim 1 has been amended herein to specify that the mold components comprise a mold core and an exterior mold. In addition, the “clamping” means in claim 3 has been replaced with “connecting” means. No new matter is introduced by these amendments. Support for the amendment to claim 1 can be found in the application as filed, for example, on page 1, lines 10-12, and in originally filed claim 4. Support for the amendment to claim 3 can be found throughout the application as filed. No new matter is introduced hereby and entry of the amendment is respectfully requested.

Regarding the Interview

Applicant appreciates the time and courtesy extended by Ms. Lazor in interviewing this case with Applicant’s attorney by telephone on 17 May 2004. In particular, the Hvidegaard reference was discussed, with relation to how the inner core is mounted on lifting device 9 and displaced upward into the outer mold during the casting process. Applicant proposed amending claim 1 to specify that the mold components comprise an exterior mold and an inner mold core. Ms. Lazor indicated that she was not familiar enough with the reference during this interview to state whether Applicant’s amendment would overcome the rejection based on this reference.

Regarding the Drawings

The drawings have been objected to on the basis that the claims recite a clamping means, but a clamping means is not shown in the drawings. Applicant respectfully submits that the objection is improper, as the clamping means has been shown and identified in the drawings, as would be appreciated by those skilled in the art.

As detailed in the specification, the clamping means comprises several components. For example, the specification provides, on page 6, lines 13 – 23, that transverse beam 20 has locking bolts 21a, 21b on both ends engaging with matching locking retainers 22a, 22b. In addition, vertical locking bolts 23a, 23b are mounted on the bottom of the transverse beam. Vertical locking bolts 24a, 24b are mounted on the bottom side at the lower end of shaking device 11. Locking retainers 25a, 25b are on the upper ends of vertical bars 15c, 15d. Transverse supports 26a, 26b can engage via the locking bolts fixed to upper mold frame 14. Since it would be readily understood by those skilled in the art that these components relate to clamping means, Applicant respectfully submits that the drawings do show clamping means and removal of the objection is requested.

Rejections Under 35 U.S.C. §112

Claims 1 and 3 have been rejected under 35 U.S.C. §112, second paragraph, on the basis that there is insufficient antecedent basis for the “mold components” limitations. In addition, claim 3 has been rejected under 35 U.S.C. §112, second paragraph, because there is insufficient antecedent basis for the “clamping means.”

Applicant has amended claim 1 here to recite proper antecedent basis for the term “mold components.” In addition, claim 3 has been amended to replace the term “clamping” means with “connecting” means, for which there is already sufficient antecedent basis. Accordingly, Applicant submits that the claims as amended are clear and definite and respectfully requests that the rejections be withdrawn.

Rejections Under 35 U.S.C. §103

Claims 1 and 3 are rejected under 35 U.S.C. §103 (a) as being obvious over PCT Publication WO 98/57786 to Hvidegaard in view of U.S. patent 5,902,528 to Spragg. Applicant respectfully traverses this rejection.

Methods of the present invention relate to producing hollow bodies from mixed material involving rapidly changing out the mold to speed up production. In these methods at least the exterior mold and mold core are assembled in an assembly area prior to the mold exchange. They are transported into and out of the molding area as a pre-mounted assembly. This enables a subsequent mold assembly to be transported into the molding area.

As amended herein, claim 1 relates to such a method where the mold components comprise an exterior mold and an interior mold core. In addition, claim 1 now specifies “assembling at least the mold core and the exterior mold...at an assembly area previous to a mold change....”

Hvidegaard, however, relates to an apparatus for casting pipes where there are at least two stationary exterior molds. This allows at least two pipes to be formed at approximately the same time. However, as pointed out during the Examiner interview, Hvidegaard does not teach or suggest

an apparatus where at least the exterior mold and the mold core are assembled in an assembly area prior to the mold exchange.

For example, in Hvidegaard on page 7, lines 31-35, it states that “beneath each of the casting stations, the plant has a vertically displaceable lifting device 9 on which an inner core may be mounted which may be displaced upwards and into the outer mould and the bottom ring thereof during the casting process.” Therefore, in Hvidegaard the inner mold core is not assembled with the exterior mold at an assembly area previous to a mold change. Applicant notes that neither Spragg nor Fischer provides the missing element where at least the mold core and the exterior mold are assembled at an assembly area previous to a mold change.

Accordingly, Applicant submits that a *prima facie* case of obviousness has not been established, since each and every element of the claims is not taught or suggested by the prior art. Withdrawal of the rejection is respectfully requested.

Claims 2 is rejected under 35 U.S.C. §103(a) as being obvious over Hvidegaard and Spragg, in view of U.S. patent 3,888,960 to Fischer. However, Applicant submits that since Hvidegaard does not disclose or suggest at least the mold core and the exterior mold being assembled at an assembly area previous to a mold change, and since this element is not taught or suggested in either Spragg or Fisher, then dependent claim 2 cannot be considered obvious either. Withdrawal of the rejection is respectfully requested.

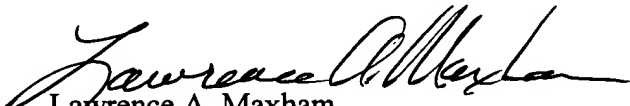


CONCLUSION

For the reasons pointed out above, Applicant believes that the application is in condition for allowance and such action is respectfully solicited. Should any issues remain unresolved, Examiner Lazor is invited to telephone the undersigned attorney.

Respectfully submitted,

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